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Western and Northern Region

Région de l'Ouest et du Nord

Environmental Protection

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PCB INTERIM ORDER COMPLIANCE INSPECTIONS OF DUST SUPPRESSION OIL: MANITOBA 1990

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ABSTRACT

A project was conducted in Manitoba in the summer of 1990 to determine Polychlorinated Biphenyl (PCB) contamination of waste oil applied to roads for dust suppression, and to ensure that oil applicators were aware of regulatory requirements. Inspections were conducted and nine oil samples collected to determine compliance with the Chlorobiphenyls Interim Order, which specifies a maximum concentration of 5 ppm. There was no detectable PCB contamination of any of the road oil sampled from the rural municipalities, towns and villages in Manitoba.

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Introduction

Section 5 (2)(b) of the Chlorobiphenyls Interim Order states that the maximum concentration of PCB that may be released "in respect to an application to a road surface is 5 parts per million by weight of the liquid."

Since its coming into force under the authority of the Environmental Contaminants Act (ECA) in 1985 as Chlorobiphenyl Regulations No. 3 (Release), and its subsequent roll over into the Canadian Environmental Protection Act in the current Chlorobiphenyls Interim Order (1989), there has been little awareness of this section among those involved in road application of oil in Manitoba. Also, no enforcement or compliance monitoring under the authority of this section of the Order had occurred in Manitoba. Beginning in 1989, the Manitoba District Office of Environmental Protection began to address these two issues.

The liquid most likely to be contaminated with PCBs and applied to a road surface would be waste oil used as a dust suppressant. Although other liquids are used for dust control, it is highly unlikely that PCBs would be a contaminant in them.

On the other hand, PCB-contaminated mineral oil or askarel-type oil from a transformer could be added to a waste oil holding tank either in ignorance of the nature of the oil, or through a

deliberate attempt to avoid high storage and disposal costs. In some instances, waste oil collectors have been known to leave the tops off of oil storage tanks, increasing the likelihood of contamination from outside sources.

I.D. Systems, Ltd. was contracted in 1989 to conduct a survey of all Manitoba towns and rural municipalities to determine where waste oil was used for dust suppression. The completed report, "A Report on Road Dust Suppression in Manitoba (1989)," listed for each jurisdiction a primary contact, the substance applied to the road, the source of the substance, and the applicator.

This report was used as a basis for a follow-up inspection program in the summer of 1990.

CEPA Considerations

All inspections were conducted by a CEPA inspector, in accordance with the CEPA Enforcement and Compliance Policy, so that potential violations could be met with an authoritative and legal enforcement response.

Samples were to be taken under the inspection powers provided by CEPA in section 100, which states that an inspector may

> "at any reasonable time enter and inspect any place if the inspector has reasonable grounds to believe that

(a) there can be found in the place a substance or class of substances to which this Act applies or a product containing such a substance."

The Enforcement and Compliance Policy further states that an inspector "must have reasonable grounds to believe that, on the premises that he or she intends to enter and inspect, there are activities, materials, substances, records, books, electronic data or other documents that are subject to the Act or relevant to its administration."

It was thus determined that sampling of oil would have to occur at the actual site of application to the road surface, since it was only at that point that there were both the substance and the activity subject to the Act and the regulation.

In order to sample at the time of application, assistance from the various jurisdictions was required, so that an inspector could be present. Each municipal contact person was asked to telephone the Environmental Protection office in Winnipeg to advise an inspector when and where oil was being applied. This request was made under the authority of s. 102 of CEPA, which states that people in charge of facilities under inspection:

"shall provide the inspector with such information with respect to the administration of this Act and the regulations as the inspector may reasonably require."

In order to take any enforcement action should a violation be discovered, the sampling procedure and analysis must be done by certified inspectors and analysts, and must be done maintaining a legal record of chain of custody for samples. Since the Environmental Protection Regional Laboratory is in Edmonton, sending the samples to the certified analysts there would have delayed the analysis results likely until the road oiling would have been completed. In order to deal with the twin needs for rapid turn-around and for legal analysis, it was decided to collect two samples simultaneously. The first sample would be provided to the Manitoba Research Council Laboratory in Winnipeg, which could provide an analysis with a detection limit of 2 ppm within 24 hours.

The second sample would be immediately locked in a secure box with a chain of custody form prepared. Should the first sample be found to be contaminated with PCBs, the second sample would be shipped as a legal sample to the Environmental Protection Laboratory in Edmonton to be analyzed by a CEPA certified analyst. Sample preservation was not an issue since PCBs are stable.

Methodology: Preparation, Sampling, and Follow-up

Initially, all the agencies that used waste oil in the 1989 I.D. Systems, Ltd. report were contacted to discover whether they were still planning on using it for dust suppression in the summer of 1989.

Once the appropriate person was contacted he or she was given a brief outline of Environmental Protection's plans and under what authority the monitoring of the used oil was being conducted.

After it was determined that the agency was again planning on using waste oil for road dust suppression in 1990, the contact was asked approximately when he or she would be having the roads oiled and the request was made to provide Environmental Protection more specific advance notice. The contact person was then sent a letter confirming this conversation (see Appendix B1).

When the contact person called with specific information about sampling, the CEPA inspector, with a summer student, met the applicator at the application site. The inspector took samples and discussed the procedure and regulations while the student took pictures of the vehicle, licence plate, sampling and of the actual application of the oil to the road. A copy of the Interim Order was given to the contact person. The pictures were taken in the event enforcement action was required.

The actual sampling procedure was brief. The samples were taken in 40 ml amber glass bottles prepared by the Western and Northern Region Environmental Protection Laboratory in Edmonton. With the vehicle stationary, the oil nozzle was opened up for a few seconds and both sample bottles were held under the stream of oil. This was accomplished with a minimal waste of oil and without run-off.

The agencies involved in the road oiling were contacted by telephone as soon as the results were known. In some cases the companies contracted to do the oiling were also contacted.
After the contacts were telephoned, letters were sent to confirm the results and indicate the importance of complying with the regulations (see Appendix B2). The significance of having a routine analysis performed on the used oil for dust suppression and of sending the certified results to Environmental Protection once a year were also stressed in the letters. It was advised that representative samples be taken from each storage tank prior to application and that the sample be analyzed at a reputable lab such as Manitoba Research Council's laboratory. Although this is not a legal requirement, it will assist Environmental Protection in determining the level of compliance effort municipalities are expending.

Copies of the above-mentioned letters were sent out to the companies responsible for the oil application. Individual

letters were sent out to the oiling companies if they required additional information.

Results and Discussion

The results of the summer survey are summarized in Table 1. Locations of the towns and municipalities contacted are identified in Figure 1.

A total of nine samples of used oil intended for dust control were collected for PCB analysis. None of the used oil analyzed contained PCBs in concentrations over the regulated limit of 5 ppm. In fact, none of the samples had any detectable level of PCB contamination (2 ppm detection limit). It appears that the municipalities, villages and towns of Manitoba which use waste oil for dust suppression are in compliance with the Chlorobiphenyls Interim Order.

Those agencies identified in the I.D. Systems, Ltd. report as using waste oil in 1989 are listed in Table 1. At the time of initial contact in late May, it was discovered that some municipalities left the decision on whether to use oil for dust suppression up to the councillors for their individual wards. In those instances (Cornwallis and Ste. Anne), the individual councillors are identified in the table since they were each contacted. In some cases, neighbouring councillors hired the same contractor to provide and apply the oil to the road.

Figure 1.

Manitoba Towns and Municipalities Monitored for Compliance with PCB Interim Order: Summer 1990

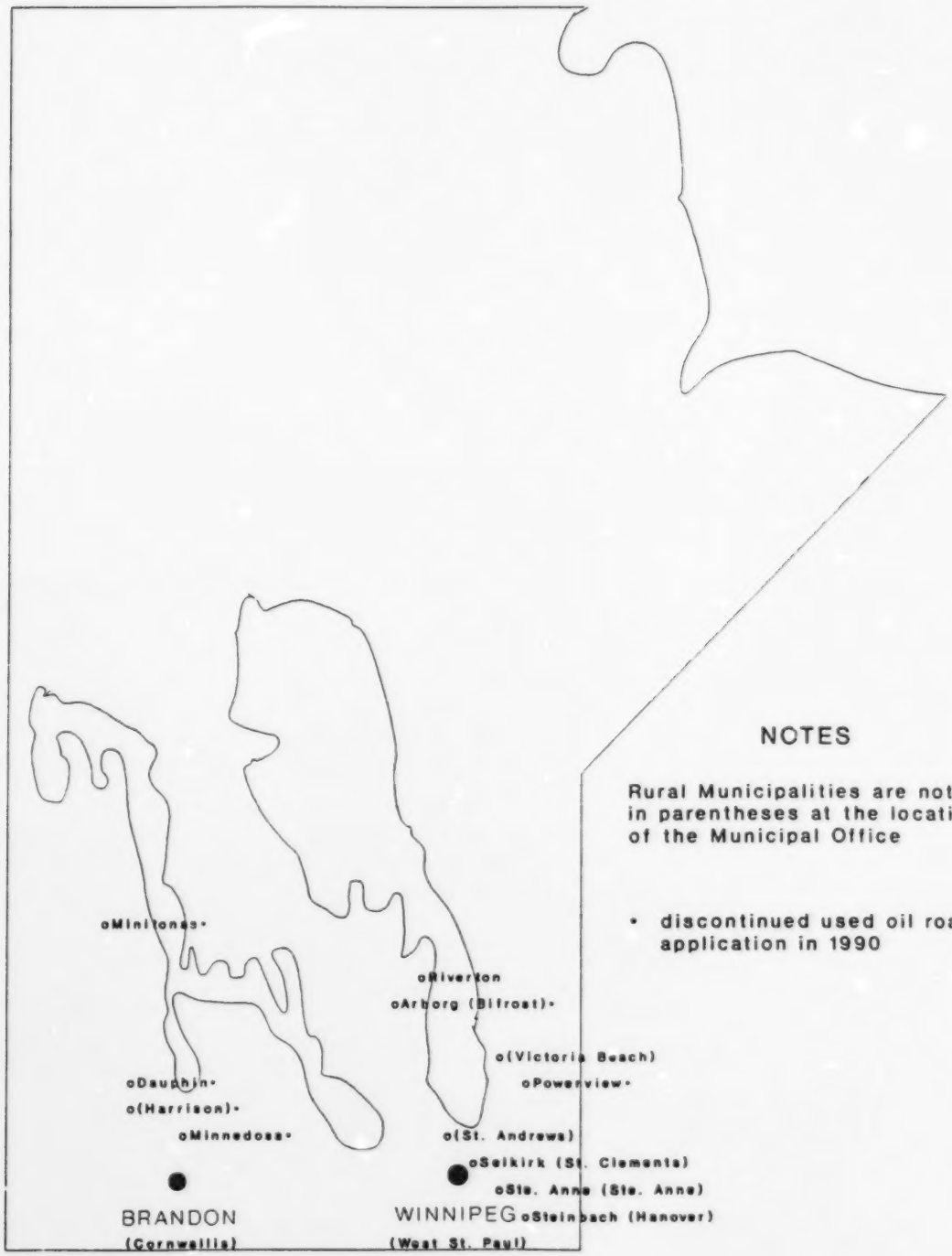


TABLE 1

RESULTS OF THE USED OIL SAMPLE ANALYSES

AGENCY	SAMPLE DATE	RESULTS	COMMENTS
VILLAGE OF ARBORG Box 159 Arborg, MB ROC OAO Attn: Bruce Swanson #376-2647	June 11/90	<2ppm	Applicator: Stan's Septic Service Oil Source: Stan's Septic Service
R.M. OF BIFROST Box 170 Arborg, MB ROC OAO Attn: L.G. Thorsteinson	--	--	**Discontinued use of used oil for dust suppression
R.M. OF CORNWALLIS P.O. Box 338 Brandon, MB R7A 5Z2 Attn: Jake Degroot #763-8811 (home) #727-2436 (municipal office)	--	--	No oiling for dust control this year.
R.M. OF CORNWALLIS Address as above Attn: D.H. Graham #727-3289	--	--	- Oiling already completed for the summer at the time of first contact Oil Applicator: Brandon Septic Service Oil Source: Brandon Septic Service
R.M. OF CORNWALLIS address as above Attn: G.C. Kissock #725-4331 (home)	--	--	No sample was taken: This batch of oil previously tested (Clark's Septic Service)
R.M. OF CORNWALLIS address as above Attn: Wayne Kreller #728-1906 (home)	June 26/90	<2ppm	Applicator: Clark's Septic Service Oil Source: Clark's Septic Service (oil is picked up from local garages)
R.M. OF CORNWALLIS P.O. Box Brandon, MB R7A 5Z2 Attn: W.G. McRae #728-4070 (home)	--	--	No sample was taken

TABLE 1

RESULTS OF THE USED OIL SAMPLE ANALYSES

AGENCY	SAMPLE DATE	RESULTS	COMMENTS
TOWN OF DAUPHIN 21 - 2nd Street N.W. Dauphin, MB R7N 1H1 #638-3601	--	--	**Discontinued use of used oil for dust suppression
R.M. OF HANOVER Box 1720 216 Main Street Steinbach, MB ROA 2AO Attn: Harold Fast #377-4466	Aug. 01/90	<2ppm	Oil Applicator: Rene's Septic Service Oil Source: Prime Motor Oil
R.M. OF HARRISON Box 220 Newdale, MB ROJ 1JO Attn: Tim Maluk #585-2433	--	--	**Discontinued use of used oil for dust suppression
VILLAGE OF MINITONAS Box 9 Minitonas, MB ROL 1GO Attn: Brent J. Fowler #525-4461	--	--	**Discontinued use of used oil for dust suppression
TOWN OF MINNEDOSA Box 426 Minnedosa, MB ROJ 1EO Attn: J.K. Wishart #867-2727	--	--	**Discontinued use of used oil for dust suppression
VILLAGE OF POWERVIEW Box 235 Powerview, MB ROE 1PO Attn: Louis Fenez #367-8483	--	--	**Discontinued use of used oil for dust suppression
VILLAGE OF RIVERTON Box 250 Riverton, MB ROC 2RO Attn: Marilyn Andruschak #378-2281	--	--	No sample was taken; road oiling was completed for the summer at time of first contact Applicator: Stan's Septic Service Oil Source: Stan's Septic Service

TABLE 1

RESULTS OF THE USED OIL SAMPLE ANALYSES

AGENCY	SAMPLE DATE	RESULTS	COMMENTS
R.M. OF ST. ANDREWS Clandeboye, MB ROC OPO Attn: Wenzel Preun #738-4337	June 6/90	<2ppm	Applicator: self applied Oil Source: Dusty the Dustman
R.M. OF STE. ANNE Box 40 Ste. Anne, MB ROA 1RO Attn: Ron Barkman #326-2696 (home) #422-5929 (municipal office)	June 13/90	<2ppm	Applicator: Dusty the Dustman Oil Supplier: Dusty the Dustman
R.M. OF STE. ANNE Address as above Attn: Albert Chaput 422-8041	--	--	No oiling was done this year due to rainfall. Road oil use probably will be discontinued next summer.
R.M. OF STE. ANNE Address as above Attn: Hubert Gagnon #422-5924	--	--	No sample taken due to failure of councillor to contact EP Applicator: Dusty the Dustman Oil Source: Dusty the Dustman
R.M. OF STE. ANNE Address as above Attn: Rene Picard #422-8679	--	--	No sample was taken due to previous testing in this municipality Applicator: Dusty the Dustman Oil Source: Dusty the Dustman
R.M. OF STE. ANNE Address as above Attn: Oram Proulx #422-5586	--	--	No sample was taken; this batch of oil was previously sampled. Applicator: Dusty the Dustman Oil Source: Dusty the Dustman

TABLE 1

RESULTS OF THE USED OIL SAMPLE ANALYSES

AGENCY	SAMPLE DATE	RESULTS	COMMENTS
R.M. OF STE. ANNE Address as above Attn: Abe J. Unger #355-4656	--	--	No sample was taken; this batch of oil was previously sampled. Applicator: Rene's Septic Tank Cleaning Service Oil Source: Rene's Septic Tank Cleaning Service
VILLAGE OF STE. ANNE Box 220 Ste. Anne, MB ROA 1RO Attn: Robin Lytle #422-5293	Aug. 03/90	<2ppm	Applicator: Self Applied Oil Source: Hadashville Nursery
R.M. OF ST. CLEMENTS Box 2, Grp. 35, RR1 East Selkirk, MB ROE OMO Attn: Peter Rebizant #482-3300	--	--	No sample was taken; this batch of oil previously tested (Stan's Septic Service)
TOWN OF SELKIRK 739 Sophia Selkirk, MB R1A 2M1 Attn: Randy Borsa #785-2118	July 11/90	<2ppm	Applicator: Stan's Septic Service Oil Source: Stan's Septic Service
TOWN OF STEINBACH Box 1090 Steinbach, MB ROA 2AO Attn: Jim Lohr #326-9877	June 7/90	<2ppm	Applicator: Rene's Septic Service Oil Source: Rene's Septic Service (oil is picked up from local garages)
R.M. OF VICTORIA BEACH 303-960 Portage Ave. Winnipeg, MB R3C OR4 Attn: Wilfred Anderson #1-756-2286 (Victoria Beach) #774-4263 (municipal)	--	--	No sample was taken due to failure of councillor to contact EP Oil Applicator: Jake Transport Oil Supplier: Prime Motor Oil
R.M. OF WEST ST. PAUL 3550 Main Street RR 1B Winnipeg, MB R3C 4A3 Attn: Jack Letkeman #338-0306	June 15/90	<2ppm	Applicator: Self Applied Oil Source: Service Stations and Construction companies throughout the municipality

Samples were only taken at one of the locations in those instances. Nevertheless, as part of the regulation education process, letters were sent to each councillor, whether or not the oil had been sampled. A letter was also mailed to the secretary-treasurer. Though this person was not immediately responsible for road oiling, it was thought he or she would be most likely to have the responsibility to pass on information on the Chlorobiphenyls Interim Order should the individual councillors not be re-elected.

Six jurisdictions had discontinued the use of waste oil for road dust suppression. (R.M.'s of Bifrost, Harrison; Towns of Dauphin, Minnedosa; Villages of Minitonas, Powerview.) Letters were sent to these people as well (see Appendix B3) to ensure that if the municipalities did decide to use oil again, they would be aware of their legal responsibilities.

The summer of 1990 was not ideal for getting a full picture of the use of waste oil on roads. The summer was quite rainy and it was unnecessary for some of the municipalities to oil. In other cases the oiling was rescheduled so many times because of the rain, that the contacts forgot to telephone Environmental Protection when it finally became dry enough to oil.

The municipalities which had initially informed Environmental Protection of their intention to use waste oil, yet which had not contacted Environmental Protection by July 31, 1990, were

telephoned to determine what their road oiling plans were. As a result, two more jurisdictions were sampled. (R.M. of Hanover, Village of Ste. Anne.) Unfortunately, this was too late for some of the municipalities as they had already completed the road oiling for the summer without contacting Environmental Protection as they had promised.

Letters were sent out to those who had oiled without contacting Environmental Protection (see Appendix B4). These letters outlined the steps that the contacts should follow to ensure that in the future they are applying used oil with PCB concentrations that are within legal limits.

The oil applied to roads in Manitoba in 1990 was supplied by six different companies:

1) Dusty the Dustman
   Lockport, Manitoba
2) Stan's Septic Service
   Arborg, Manitoba
3) Clark's Septic Service
   Brandon, Manitoba
4) Rene's Septic Service
   Steinbach, Manitoba
5) Prime Motor Oils
   Winnipeg, Manitoba

6) Brandon Septic Service
Brandon, Manitoba

The only other suppliers of oil were the Hadashville Nursery, which gave his year's worth of waste oil to the Village of Ste. Anne, and the R.M. of West St. Paul which collected its own oil supply from service stations throughout the municipality. These jurisdictions applied the oil themselves. All of these suppliers except Brandon Septic Service had a sample of their product taken at least once during the summer.

Where the same dust suppression agency was hired to oil many different areas, it was occasionally decided to forego any additional testing if the applicator/supplier had been tested previously.

"Dusty the Dustman", for example, was only tested twice before it was deemed unnecessary to do any additional sampling. Dusty the Dustman utilizes three types of used "oils" for dust suppression: 1) oil-based, 2) water-based (unknown ingredients) and 3) oil emulsion. The oil-base was used primarily on roads with a high clay content which do not absorb water readily while the water-based substance was used on roads with more of a sandy base. Oil emulsion is by far the most expensive of the three but it is also reputed to remain the longest on most roads.

All three substances were categorized by Art Leydier, owner of Dusty the Dustman, as used oil, although the second type was not an oil and had to be analyzed by the lab as a water sample. This second type was used in the R.M. of Ste. Anne. Samples were only taken from the first two types of "oils" since the oil emulsion was not used in the summer of 1990.

Some contacts did not appear to take the sampling seriously and did not contact Environmental Protection when they did decide to use waste oil. It is important, therefore, to make the contacts aware that they are required by law (CEPA s. 102) to "give the inspector all reasonable assistance..." It is also important for them to understand that there can be serious consequences if they refuse to do so. It is necessary to keep a record of telephone calls including the dates and times of conversations. This would prove especially beneficial if it becomes necessary to investigate someone for non-compliance with the regulations.

For the most part, however, people involved seemed to be quite helpful and willing to comply with any requests. Many seemed to be quite concerned about the possible hazards of using contaminated used oil.

Non-regulated Issues Regarding the Use of Waste Oil for Road Dust Suppression

Environmental Protection's summer program to monitor waste oil used for dust suppression in Manitoba necessarily dealt with PCB-contamination only, since the Chlorobiphenyls Interim Order is the only applicable federal regulation. There are other concerns, however, that used oil may impose an environmental threat because of contaminants in the oil (heavy metals such as lead), or through oil contamination of surface or groundwater (Techman Engineering, 1982). The eventual fate of used oil contaminants can be highly variable and is dependent on a variety of factors, including soil type, oil properties, weather, and traffic conditions.

The use of waste oil for road dust suppression is often discouraged in favour of uses of the oil that may be markedly better environmentally (re-refining, fuel use in cement kilns) even though they may not be the most economically feasible end-use.

In Manitoba, road oiling for dust suppression is not regulated, though the provincial Department of Environment has been discouraging its use. Indeed, the frequency has been decreasing. During this summer's program, six of the 18 municipalities, villages, and towns that had used oil in 1989 had discontinued this practice, -- one in response to a citizen's petition (R.M.

of Harrison). Those applying oil this year often had many questions about proposed regulations, and suggested that they may discontinue the practice, though on one occasion there was some frustration expressed that the alternative of re-refining was economically impractical.

The Canadian Council of Ministers of the Environment (CCME), in its 1989 Code of Practice for Used Oil Management in Canada states:

> Road oiling should be discouraged in jurisdictions where alternative and better reuse practices (re-refining and controlled burning) are available. Road oiling, however, should be considered as a best available reuse practice in remote and rural areas where the reuse options of re-refining and controlled burning, as well as acceptable disposal practices are not available.

It is interesting to note that though the Code of Practice recommends road oiling as a "best available reuse practice," especially in remote or rural areas, four of the six jurisdictions that discontinued the practice of road oiling for dust suppression were more remote from the city of Winnipeg than the other twelve that continued its use (Figure 1). No communities in Northern Manitoba used waste oil for road application, according to the I.D. Systems, Ltd. survey. It is not known how these communities dispose of waste oil.

Finally, during the summer compliance monitoring program, it was noted that there was often a distinct aqueous or solvent layer in the sample that quickly separated from the oil. There were two likely causes for this:

1) **Inadequate waste disposal handling practices.** Especially when the source of the oil is a service station, solvent contamination seems almost inevitable. Waste segregation at small garages is not always adequate and a solvent layer often separated out in the oil samples.

2) **Sloppy waste management practices.** In one case, an oil applicator noted that he had picked up waste oil from a large holding tank for a major service centre only to discover that the tank had been uncovered during a major rainfall, and was thus largely full of water. Though this was neither deliberate nor hazardous, it indicates a costly and careless attitude toward waste oil handling.

Therefore, though PCB contamination may be the regulated aspect of waste oil application to roads, there is also the important aspect of improper hazardous waste mixing and disposal tied to its use.

Recommendations:

1. Monitoring should be done in 1991 to ensure that jurisdictions have been using oil that has been analysed for compliance with PCB regulations. This should involve follow-up letters and/or telephone calls in early April as reminders of the regulations. This letter should stress the importance of compliance with the regulations. This written documentation begins the process of establishing a compliance history for these jurisdictions.

2. Spot checks should be done of two road-oil applications to maintain a federal enforcement/compliance presence with respect to this regulated activity. To ensure that contact is made before oil application, telephone calls to arrange for on-site inspections should be initiated in early April. It often takes a lot of time to reach some of the contacts because they often either do not return telephone calls, or the nature of their jobs requires them to spend a lot of time out of the office.

3. An important concern outside of the jurisdiction of the federal government is the issue of waste segregation at those service centres that have been sending solvent-oil mixtures to companies for hazardous waste pick-up. It would also be useful to determine where used oil is being disposed of in remote regions of the province, since it is apparently

not being used for application to roads for dust control. Hazardous waste pick-up in these areas would be more costly, and less convenient, than in areas closer to the city of Winnipeg, so there is reason to suppose that used engine oil is being improperly disposed of in these areas.

Conclusions

A project was conducted in Manitoba in the summer of 1990 to determine if waste oil applied to roads for dust suppression was contaminated with polychlorinated biphenyls (PCB) and to ensure that oil applicators were aware of regulatory requirements under the Canadian Environmental Protection Act. Inspections were conducted and nine oil samples collected to determine compliance with the Chlorobiphenyls Interim Order (February, 1989) which specifies a maximum concentration of 5 ppm PCB for application to roads. There was no delectable PCB contamination of any of the road oil sampled from the rural municipalities, towns, and villages in Manitoba. Non-compliance with PCB regulations by those responsible for dust control was not identified.

REFERENCES

Canadian Environmental Protection Act (CEPA). June 1988.

I.D. Systems, Ltd. 1989. A Report on Road Dust Suppression in Manitoba, prepared for Environment Canada.

Interim Order Respecting Chlorobiphenyls. February 1989.

Monenco Consultants, Ltd. 1989. Code of Practice for Use Oil Management in Canada, prepared for Environment Canada. CCME-TS/WM-TRE006E.

Techman Engineering Ltd. 1982. Road Dust Suppression in Northern and Western Canada: Manual of Recommended Procedures. A report prepared for Environment Canada, Alberta Environment, Ministry of Environment for B.C., Manitoba Environment, NWT Environmental Services. Calgary.

CHLOROBIPHENYLS INTERIM ORDER

P.C. 1989-296 February 23, 1989

Whereas pursuant to subsection 35(1) of the Canadian Environmental Protection Act*, the Minister of the Environment, on February 20, 1989, made the annexed Interim Order Respecting Chlorobiphenyls to deal with a significant danger to the environment and to human life and health;

Whereas the Minister of the Environment has, within twenty-four hours after making the Order, offered to consult the governments of all the affected provinces to determine whether they are prepared to take sufficient action to deal with the significant danger;

Whereas the Minister of the Environment has consulted with other Ministers of the Crown in right of Canada to determine whether any action can be taken under any other Act of Parliament to deal with the significant danger;

And whereas less than fourteen days have elapsed since the Order was made;

Therefore, Her Excellency the Governor General in Council, on the recommendation of the Minister of the Environment, pursuant to subsection 35(3) of the Canadian Environmental Protection Act*, is pleased hereby to approve the annexed Interim Order Respecting Chlorobiphenyls made by the Minister of the Environment on February 20, 1989.

INTERIM ORDER RESPECTING CHLOROBIPHENYLS (PCBs)

Whereas chlorobiphenyls are substances specified on the List of Toxic Substances in Schedule I to the Canadian Environmental Protection Act*;

And Whereas the Minister of the Environment and the Minister of National Health and Welfare believe that chlorobiphenyls are not adequately regulated and that immediate action is required to deal with a significant danger to the environment and to human life and health;

Therefore, the Minister of the Environment, pursuant to subsection 35(1) of the Canadian Environmental Protection Act*, hereby makes the annexed Interim Order respecting chlorobiphenyls,

Ottawa, February 20, 1989

LUCIEN BOUCHARD
Minister of the Environment

INTERIM ORDER RESPECTING CHLOROBIPHENYLS

Short Title

1. This Order may be cited as the *Chlorobiphenyls Interim Order*.

* S.C. 1988, c. 22.

ARRÊTÉ D'URGENCE SUR LES BIPHÉNYLES CHLORÉS

C.P. 1989-296 Le 23 février 1989

Attendu que, conformément au paragraphe 35(1) de la *Loi canadienne sur la protection de l'environnement**, le ministre de l'Environnement a, le 20 février 1989, pris l'Arrêté d'urgence concernant les biphényles chlorés afin de parer à tout danger appréciable pour l'environnement, la vie humaine et la santé;

Attendu que le ministre de l'Environnement a, dans les vingt-quatre heures suivant la prise de l'arrêté, offert de consulter tous les gouvernements des provinces affectées afin de déterminer s'ils sont disposés à prendre les moyens nécessaires pour parer au danger en question;

Attendu que le ministre de l'Environnement a consulté les autres ministres fédéraux afin de déterminer si des mesures peuvent être prises sous le régime d'une autre loi fédérale pour parer au danger en question;

Attendu que moins de quatorze jours se sont écoulés depuis la prise de l'arrêté;

A ces causes, sur avis conforme du ministre de l'Environnement et en vertu du paragraphe 35(3) de la *Loi canadienne sur la protection de l'environnement**, il plaît à Son Excellence le Gouverneur général en conseil d'approuver l'Arrêté d'urgence concernant les biphényles chlorés, ci-après, pris le 20 février 1989 par le ministre de l'Environnement.

ARRÊTÉ D'URGENCE CONCERNANT LES BIPHÉNYLES CHLORÉS

Attendu que les biphényles chlorés sont des substances inscrites sur la liste des substances toxiques figurant à l'Annexe I de la *Loi canadienne sur la protection de l'environnement**;

Attendu que le ministre de l'Environnement et le ministre de la Santé nationale et du Bien-être social estiment que les biphényles chlorés ne sont pas réglementés comme il convient et qu'une intervention est nécessaire, afin de parer à tout danger appréciable pour l'environnement, la vie humaine et la santé;

A ces causes, en vertu du paragraphe 35(1) de la *Loi canadienne sur la protection de l'environnement*, le ministre de l'Environnement prend l'Arrêté d'urgence concernant les biphényles chlorés (BPC), ci-après.

Ottawa, le 20 février 1989

Le ministre de l'Environnement
LUCIEN BOUCHARD

ARRÊTÉ D'URGENCE CONCERNANT LES BIPHÉNYLES CHLORÉS

Titre abrégé

1. *Arrêté d'urgence sur les biphényles chlorés.*

* L.C. 1988, ch. 22.

Interpretation

2. In this Order,

"chlorobiphenyls" means chlorobiphenyls that have the molecular formula $C_{12}H_{10-n}Cl_n$ in which "n" is greater than 2; (*biphényles chlorés*)

"electrical transformers" includes transformer/rectifier assemblies installed in a common enclosure. (*transformateur électrique*)

Prohibition

3. (1) Subject to subsection (2) and section 4, no person shall manufacture, process, use, offer for sale or import chlorobiphenyls for any of the following commercial, manufacturing or processing uses:

(*a*) in the operation of any product, machinery or equipment, other than

(i) electrical capacitors and electrical transformers and associated electrical equipment,

(ii) heat transfer equipment, hydraulic equipment, electromagnets, other than electromagnets referred to in paragraph (*b*), and vapour diffusion pumps that were designed to use chlorobiphenyls and that were in use in Canada on or before September 1, 1977, or

(iii) machinery or equipment for the destruction of chlorobiphenyls;

(*b*) in the operation of electromagnets that are used to handle food, animal feed or any additive to food or animal feed;

(*c*) as a constituent of any product, machinery or equipment manufactured in or imported into Canada on or after September 1, 1977, other than electrical capacitors and electrical transformers and associated electrical equipment;

(*d*) as a constituent of electrical capacitors and electrical transformers and associated electrical equipment manufactured in or imported into Canada on or after July 1, 1980;

(*e*) in the servicing or maintenance of any product, machinery or equipment other than electromagnets and electrical transformers and associated electrical equipment from which the chlorobiphenyls are removed to allow servicing and maintenance.

(2) Subsection (1) does not apply when chlorobiphenyls are adventitiously present in a product and the quantity or concentration of chlorobiphenyls in the product is not inconsistent with good manufacturing practice.

Concentration in Products

4. (1) Subject to subsection (2), the concentration of chlorobiphenyls that may be contained in any liquid in products, machinery or equipment referred to in subparagraphs 3(1)(a)(i) or (ii) that are manufactured, imported or offered for sale in Canada shall not exceed 50 parts per million by weight of the liquid.

Définitions

2. Les définitions qui suivent s'appliquent au présent arrêté d'urgence.

«biphényles chlorés» Les composés de formule moléculaire $C_{12}H_{10-n}Cl_n$, où «n» est plus grand que 2. (*chlorobiphenyls*)

«transformateur électrique» Ensemble transformateur redresseur installé dans une même enceinte. (*electrical transformers*)

Interdiction

3. (1) Sous réserve du paragraphe (2) et de l'article 4, il est interdit de fabriquer, de transformer, d'utiliser, de mettre en vente ou d'importer des biphényles chlorés à des fins commerciales, de fabrication ou de transformation:

a) pour l'exploitation de tout produit, de toute machinerie ou de tout équipement, à l'exclusion:

(i) des condensateurs électriques et des transformateurs électriques et de l'équipement électrique connexe,

(ii) de l'équipement caloporteur, de l'équipement hydraulique, des électro-aimants, à l'exception de ceux visés à l'alinéa *b*), et des pompes à diffusion conçues pour utiliser des biphényles chlorés et mis en service au Canada le 1er septembre 1977 ou avant cette date,

(iii) de la machinerie ou de l'équipement destiné à détruire les biphényles chlorés;

b) pour l'exploitation d'électro-aimants servant à la manutention d'aliments destinés à l'homme ou aux animaux ou de leurs additifs;

c) comme composant de tout produit, de toute machinerie ou de tout équipement fabriqué ou importé au Canada le 1er septembre 1977 ou après cette date, à l'exclusion des condensateurs électriques, des transformateurs électriques et de l'équipement électrique connexe;

d) comme composant de condensateurs électriques et de transformateurs électriques et de l'équipement électrique connexe, fabriqués ou importés au Canada le 1er juillet 1980 ou après cette date,

e) pour la réparation ou l'entretien de tout produit, machinerie ou équipement, à l'exclusion des transformateurs électriques et de l'équipement électrique connexe et des électro-aimants, duquel les biphényles chlorés sont retirés afin de permettre la réparation et l'entretien.

f) comme nouveau fluide de remplissage ou fluide d'appoint pour la réparation ou l'entretien de tout électro-aimant et de tout transformateur électrique et l'équipement électrique connexe.

(2) Le paragraphe (1) ne s'applique pas lorsque des biphényles chlorés se trouvent fortuitement dans un produit et que leur quantité ou concentration ne va pas à l'encontre de celle qu'exigent les règles de l'art en matière de fabrication.

Concentration dans les produits

4. (1) Sous réserve du paragraphe (2), la concentration de biphényles chlorés d'un liquide contenu dans un produit, de la machinerie ou de l'équipement visé au sous-alinéa 3(1)a)(i) ou (ii) qui est fabriqué, importé ou mis en vente au Canada, ne peut excéder 50 ppm en poids du liquide.

(2) The concentration permitted under subsection (1) does not apply in respect of concentrations of chlorobiphenyls in the liquid in any product, machinery or equipment referred to in subsection (1) where the product is

(*a*) offered for sale as a necessary and integral part of a building, plant or structure;

(*b*) imported for the destruction of the chlorobiphenyls contained in that product; or

(*c*) offered for sale for destruction or storage awaiting destruction of the chlorobiphenyls contained in that product.

Concentrations or Quantities that may be Released

5. (1) The concentration of chlorobiphenyls in any liquid that may be released into the environment, in the course of a commercial, manufacturing or processing activity in any geographical area of Canada, other than any water or place to which subsection 36(3) of the *Fisheries Act* applies, shall not exceed the concentration specified in subsection (2) in respect of that activity.

(2) For the purpose of subsection (1), the concentration that may be released

(a) in respect of a commercial, manufacturing or processing activity, other than

(i) an application to a road surface, or

(ii) an activity described in section 6, is 50 parts per million by weight of the liquid; and

(b) in respect of an application to a road surface is 5 parts per million by weight of the liquid.

6. The quantity of chlorobiphenyls that may be released into the environment shall not exceed 1 gram per day in respect of any item of equipment or any receptacle or material containing equipment in the course of the operation, servicing, maintenance, decommissioning, transporting or storage of

(*a*) electrical capacitors and electrical transformers and associated electrical equipment manufactured in or imported into Canada before July 1, 1980; or

(*b*) heat transfer equipment, hydraulic equipment, electromagnets and vapour diffusion pumps designed to use chlorobiphenyls and manufactured in or imported into Canada before September 1, 1977.

(2) La concentration prévue au paragraphe (1) ne s'applique pas au liquide contenu dans un produit, de la machinerie ou de l'équipement qui est:

a) mis en vente en tant que partie essentielle ou intégrante d'un immeuble, d'une installation ou d'une structure;

b) importé pour la destruction des biphényles chlorés qui y sont contenus;

c) mis en vente pour la destruction des biphényles chlorés qui y sont contenus ou entreposés préalablement à la destruction de ces biphényles chlorés.

Quantité ou concentration qui peut être rejetée

5. (1) La concentration de biphényles chlorés contenue dans tout liquide qui peut être rejetée, dans l'environnement, dans une région du Canada, à l'exclusion des eaux ou des lieux visés au paragraphe 36(3) de la *Loi sur les pêcheries*, au cours d'une activité commerciale, de fabrication ou de transformation, ne peut excéder celle précisée au paragraphe (2) à l'égard de cette activité.

(2) Pour l'application du paragraphe (1), la concentration qui peut être rejetée est de:

a) 50 ppm en poids du liquide, à l'égard d'une activité commerciale, de fabrication ou de transformation à l'exclusion:

(i) du revêtement de la surface d'une route,

(ii) d'une activité visée à l'article 6;

b) 5 ppm en poids du liquide, à l'égard d'un revêtement de la surface d'une route.

6. La quantité de biphényles chlorés qui peut être rejetée, dans l'environnement, dans une région du Canada ne peut excéder 1 g par jour pour chaque pièce d'équipement ou contenant ou emballage d'équipement au cours de l'exploitation, de l'entretien, de la maintenance, de la mise hors service, du transport ou de l'entreposage de l'équipement suivant:

a) des condensateurs électriques ainsi que des transformateurs électriques et de l'équipement connexe, fabriqués ou importés au Canada avant le 1er juillet 1980;

b) de l'équipement caloporteur, de l'équipement hydraulique, des électro-aimants et des pompes à diffusion conçus pour utiliser des biphényles chlorés et fabriqués ou importés au Canada avant le 1er septembre 1977.

EXPLANATORY NOTE

(*This note is not part of the Order.*)

Section 35 of the Canadian Environmental Protection Act provides the Minister of the Environment with authority to make an interim order where the Minister of the Environment and the Minister of National Health and Welfare believe that:

(*a*) a substance specified on the List of Toxic Substances is not adequately regulated, and

NOTE EXPLICATIVE

(*La présente note ne fait pas partie de l'arrêté.*)

L'article 35 de la *Loi canadienne sur la protection de l'environnement* confère au ministre de l'Environnement le pouvoir de prendre un arrêté d'urgence lorsque le ministre de la Santé nationale et du Bien-être social ainsi que lui-même estiment:

a) qu'une substance inscrite sur la liste des substances toxiques n'est pas réglementée comme il convient;

(*b*) immediate action is required to deal with a significant danger to the environment or to human life or health.

The purpose of the attached interim order is to clarify an uncertainty in law. Subsection 34(1) of the Act requires that the Governor in Council make an order adding a substance to the List of Toxic Substances in Schedule I of the Act, before any regulation can be made with respect to that substance. Regulations governing substances on the Schedule which were made under previous statutes and intended to continue under the Act lack the required orders. Therefore, to eliminate any possible doubt about the validity of regulations continued under the Act, and to avoid any threat to the environment or to human life or health posed by the substance named below, the Minister of the Environment is making the attached interim order.

The interim order is effective immediately, but, as stipulated by the Act, it must be approved by the Governor in Council within 14 days.

Under paragraph (i) of section 113 of the Canadian Environmental Protection Act, every person who fails to comply with an order made under section 35 is liable:

(*a*) on summary conviction, to a fine not exceeding three hundred thousand dollars or to imprisonment for a term not exceeding six months, or to both, or

(*b*) on indictment, to a fine not exceeding one million dollars or to imprisonment for a term not exceeding three years, or to both.

b) qu'une intervention immédiate est nécessaire, afin de parer à tout danger appréciable, soit pour l'environnement, soit pour la vie humaine ou la santé.

L'objet de l'arrêté ci-joint est de clarifier un point de droit. Le paragraphe 34(1) de la *Loi canadienne sur la protection de l'environnement* exige que, avant de réglementer une substance, le gouverneur en conseil prenne un décret pour inscrire une substance à l'Annexe I de la Loi, c'est-à-dire, à la liste des substances toxiques. Or, aucun décret de ce genre n'a été pris préalablement à la réglementation des substances énumérées dans l'Annexe, qui se trouvait sous le régime d'autres lois et qui devait être maintenue sous celui de la *Loi canadienne sur la protection de l'environnement*. Donc, afin de dissiper toute incertitude quant à la validité des règlements pris sous le régime de la Loi et pour parer à tout danger pour l'environnement, pour la vie humaine ou la santé, le ministre de l'Environnement prend l'arrêté d'urgence ci-après.

L'arrêté prend effet immédiatement, mais, comme il est précisé dans la loi, il doit être approuvé par le gouverneur en conseil dans les 14 jours qui suivent.

Conformément à l'alinéa (i) de l'article 113, quiconque ne se conforme pas à un arrêté pris dans le cadre de l'article 35 encourt:

a) par procédure sommaire, une amende maximale de trois cent mille dollars et un emprisonnement maximal de six mois, ou l'une de ces peines; ou

b) par mise en accusation, une amende maximale d'un million de dollars et un emprisonnement maximal de trois ans, ou l'une de ces peines.

Environment Canada | Environnement Canada
Conservation and Protection | Conservation et Protection

APPENDIX B1

Environmental Protection
5th Floor, 269 Main Street
WINNIPEG, MB R3C 1B2

Your file Votre référence

Our file Notre référence

4077-18

May 31, 1990

Mr. Randy Borsa
Town of Selkirk
200 Eaton Ave.
SELKIRK, MB R1A OW6

Dear Mr. Borsa:

Re: Routine Compliance Monitoring of Road Oiling

As discussed in your recent phone call with Lisa Andres of our office, Environmental Protection will be sampling road oil this summer, to monitor compliance with the Chlorobiphenyls Interim Order under the authority of the Canadian Environmental Protection Act (CEPA). This is a follow-up to the road dust suppression survey your agency participated in last year.

The actual sampling will involve a CEPA inspector taking a small amount of the oil directly from the truck that is applying the oil to the road surface. To complete this successfully, I'm requesting your co-operation in notifying us in advance of the road oil application date and location. I realize that there are instances when it is difficult to give a great deal of advance notice, but whenever possible, the sooner we are notified, the better. To do this, please call me at 983-7788 or Lisa Andres at 983-2961.

Thank you for your co-operation. If you have any further questions, please call.

Yours truly,

Wendy Tibbatts
Toxic Substances Officer, Environmental Protection
Manitoba District

Canada

Environment Canada | Environnement Canada

Conservation and Protection | Conservation et Protection

APPENDIX B2

Environmental Protection
5th Floor, 269 Main Street
WINNIPEG, MB R3C 1B2

Your file / Votre référence

Our file / Notre référence
4077-18

June 22, 1990

Town of Steinbach
Box 1090
STEINBACH, MB ROA 2AO

Attention: Mr. Jim Lohr

Dear Sir:

I am pleased to inform you that the sample of dust suppressant used oil which I collected on June 7, 1990 did not contain a detectable level of PCBs. The Chlorobiphenyls Interim Order, specifies a maximum concentration of 5 parts per million PCBs in any liquid applied to a road surface.

Used oil which is applied to roads can, intentionally or unintentionally, be contaminated with PCBs by, for example, as little as 10 litres of PCB contaminated transformer oil per 1 million litre of uncontaminated oil. For this reason it is important that you ensure that any waste oil which you plan to apply to a road surface does not contain more than the regulated limit. This assurance can only be obtained by collecting a representative oil sample from each storage tank prior to application, and having this sample analyzed by a reputable laboratory (e.g. Manitoba Research Council's laboratory) which uses appropriate analysis equipment and proper quality control procedures.

In the future, I suggest that you ensure that all waste oil applied to your roads is analyzed, as indicated above, and that you send me a copy of the certificate(s) of analysis prior to application. I wish to emphasize that non-compliance with the Chlorobiphenyls Interim Order is a serious offence which could result in fines up to one million dollars or to imprisonment for a term not exceeding three years, or both.

I would be pleased to further discuss the above. I can be reached at 983-7788.

Yours sincerely,

Wendy Tibbatts.

Wendy Tibbatts
Toxic Substances Officer, Environmental Protection
Manitoba District

Canada

Environment Canada / Environnement Canada

Conservation and Protection / Conservation et Protection

APPENDIX B3

Environmental Protection
5th Floor, 269 Main Street
WINNIPEG, MB R3C 1B2

August 1, 1990

Your file / Votre référence

Our file / Notre référence
4077-18

R.M. of Cornwallis
Box 338
BRANDON, MB R7A 5Z2
ATTN: Jake Degroot

Dear Mr. Degroot:

RE: APPLICATION OF USED OIL FOR ROAD DUST SUPPRESSION

Although your municipality did not use waste oil for road dust suppression this year, I would nevertheless like to inform you of the federal regulations that can affect this, should you resume the practice.

The Chlorobiphenyls Interim Order (attached) specifies a maximum concentration of 5 parts per million (ppm) of Chlorobiphenyls, or PCB's, in any liquid, including waste oil, that can be applied to a road surface. By next year, this limit will likely be lowered to 2 ppm.

Used oil which is applied to roads can, intentionally or unintentionally, be contaminated with PCB's by as little as 10 litres of PCB-contaminated oil. For this reason, it is important that you ensure that any waste oil which you plan to apply to a road surface does not contain PCB's in a concentration above the regulated limit. This assurance can only be obtained by collecting a representative oil sample prior to application and having this sample analyzed by a reputable laboratory (e.g. Manitoba Research Council) which uses appropriate analysis equipment and proper quality control procedures. Should you resume the practice of using waste oil for dust control, I suggest that you ensure that the oil has been analyzed, as indicated above, and that a copy of the certificate of analysis is sent to our office prior to application.

If you have any questions about this, please contact me at 983-7788.

Yours truly,

Wendy L Tibbatts

Wendy Tibbatts
Toxic Substances Officer, Environmental Protection
Manitoba District

Attachment

Canada

Environment Canada / Environnement Canada
Conservation and Protection / Conservation et Protection

APPENDIX B4

Environmental Protection
5th Floor, 269 Main Street
WINNIPEG, MB R3C 1B2

August 3, 1990

Your file / Votre référence

Our file / Notre référence
4077-18

R.M. of St. Clements
Box 2, Group 35, RR 1
EAST SELKIRK, MB R0E 0M0
ATTN: Peter Rebizant

Dear Mr. Rebizant:

RE: APPLICATION OF USED OIL FOR ROAD DUST SUPPRESSION

Since your municipality used waste oil for road dust suppression early this year, I would like to inform you of the federal regulations that can affect this practice.

The Chlorobiphenyls Interim Order (attached) specifies a maximum concentration of 5 parts per million (ppm) of Chlorobiphenyls, or PCB's, in any liquid, including waste oil, that can be applied to a road surface. By next year, this limit will likely be lowered to 2 ppm.

Used oil which is applied to roads can, intentionally or unintentionally, be contaminated with PCB's by as little as 10 litres of PCB-contaminated oil. For this reason, it is important that you ensure that any waste oil which you plan to apply to a road surface does not contain PCB's in a concentration above the regulated limit. This assurance can only be obtained by collecting a representative oil sample prior to application and having this sample analyzed by a reputable laboratory (e.g. Manitoba Research Council) which uses appropriate analysis equipment and proper quality control procedures. Should you resume the practice of using waste oil for dust control, I suggest that you ensure that the oil has been analyzed, as indicated above, and that a copy of the certificate of analysis is sent to our office prior to application.

If you have any questions about this, please contact me at 983-7788.

Yours truly,

Wendy L Tibbatts

Wendy Tibbatts
Toxic Substances Officer, Environmental Protection
Manitoba District

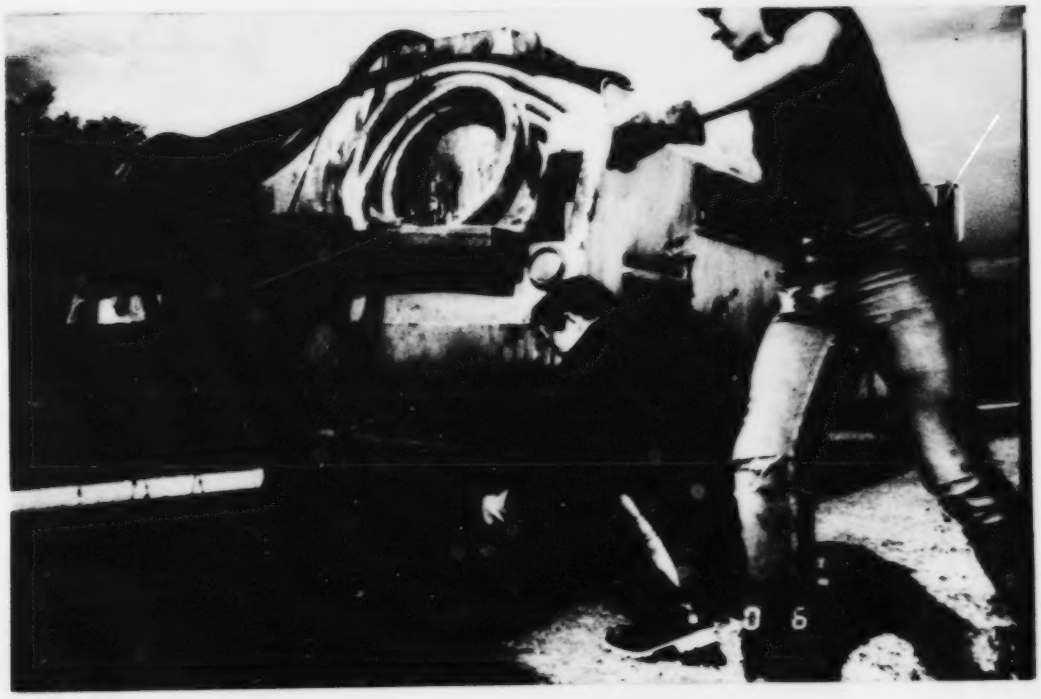
Attachment

Canada

APPENDIX C

SAMPLING IN THE MUNICIPALITY OF STE. ANNE

June 13, 1990



SAMPLING IN THE MUNICIPALITY OF WEST ST. PAUL

June 15, 1990